CLAIMS

We claim:

1. A method for treating urological and gastric disorders comprising the step of injecting submucosally or peri-urethrally into tissue at at least one injection site a composition comprising an effective amount of biologically compatible micro particles dispersed in a compatible physiological vehicle, the micro particles being characterized by a textured surface having a plurality of surface irregularities generally randomly formed therein, the textured micro particles having a combination of average particle size range and average particle texture which cooperate substantially to prevent loss of the micro particles from any injection site.

2. A method for treating urological and gastric disorders comprising the step of endoscopic injection submucosally into tissue at at least one injection site a composition comprising an effective amount of biologically compatible micro particles dispersed in a compatible physiological vehicle, the micro particles being characterized by a relatively smooth surface and having sufficient average particle size to prevent loss of the micro particles from the injection site.

3. The method as defined in claim 1 wherein the micro particles are further characterized by the textured surface having a plurality of indentations, cavities and pores forming openings within the particles, the micro particles having an average

unidimensional particle size generally between 30 and 3000 microns with the dimensions of the openings formed by the indentations, cavities and pores within the particles being generally in a range between 10 angstroms and 500 microns, the relative average particle size range and average dimensions of the openings being sufficient in combination substantially to preclude migration of the particles from any injection site.

4. A method as defined in claim 1 wherein the micro particles possess an average unidimensional particle size in the range of from about 60 microns to about 600 microns.

5. A method as defined in claim 2 wherein the micro particles are characterized by an average unidimensional particle size equal to or greater than 100 microns.

6. A method as defined in claim 3 wherein the micro particles comprise a relatively resilient material.

7. A method as defined in claim 6 wherein the resilient material is a polysiloxane and wherein the physiological vehicle comprises polyvinylpyrrolidone.

8. A method as defined in claim 1 wherein the composition is injected into the submucosal space selected from the bladder-urethral junction, the esophageal-gastric junction and the gastric-pyloric junction using a plurality of spaced injection sites.

9. A method as defined in claim 4 wherein the composition is injected into the submucosal space selected from the bladder-

urethral junction, the esophageal-gastric junction and the gastric-pyloric junction using a plurality of spaced injection sites.

10. A method as defined in claim 1 wherein the composition is injected under the intravesical portion of the ureter.

11. A method as defined in claim 4 wherein the composition is injected under the intravesical portion of the ureter.

12. A method as defined in claim 10 wherein the composition is injected using spaced injections.

13. A method as defined in claim 11 wherein the composition is injected using a plurality of spaced injections.

14. A method as defined in claim 9 wherein the amount of the composition injected per site is from about 1.0 to about 5.0 cc.

15. A method as defined in claim 10 wherein the amount of the composition injected per site is from about 1.0 to about 5.0 cc.

16. A method for treating incontinence comprising the steps of making a plurality of spaced injections into the submucosal space of the urethra of a composition comprising an amount of biologically compatible micro particles dispersed in a compatible physiological vehicle, the micro particles being further characterized by an irregular surface having a plurality of surface irregularities generally randomly formed therein; the micro particles having a combination of average particle size range and average particle surface texture which cooperate to substantially prevent loss of the prosthetic particles from any injection site.

17. A method as defined in claim 16 wherein the micro particles are further characterized by the irregular surface having a plurality of indentations, cavities and pores forming openings within the particles, the micro particles having an average unidimensional particle size generally between 30 and 3000 microns with the dimensions of the openings formed by the indentations, cavities and pores within the particles being generally in a range between 10 angstroms and 500 microns, the relative average unidimensional particle size range and average dimensions of the openings being sufficient in combination substantially to preclude migration of the particles from any injection sites.

18. A method as defined in claim 17 wherein the micro particles are of a generally uniform configuration.

19. A method as defined in claim 16 wherein the micro particles possess an average unidimensional particle size in the range of from about 80 microns to about 600 microns.

20. A method as defined in claim 17 wherein the micro particles comprise a relatively resilient material.

21. A method as defined in claim 20 wherein the resilient material is a polysiloxane.

22. A method as defined in claim 17 wherein the physiological vehicle comprises a polyvinylpyrrolidone.

23. A method for treating gastric reflux comprising the steps of making a plurality of injections at spaced sites into the appropriate submucosal space selected from the esophageal-gastric

junction and gastric-pyloric junction a composition comprising an amount of biologically compatible micro particles dispersed in a compatible physiological vehicle, the micro particles being further characterized by an irregular surface having a plurality of surface irregularities generally randomly formed therein; the micro particles having a combination of average particle size range and average particle surface texture which cooperate to substantially prevent loss of the prosthetic particles from any injection site.

24. A method is defined in claim 23 wherein the micro particles comprise a relatively resilient polysiloxane material.

25. A method as defined in claim 23 wherein the physiological vehicle comprises a polyvinylpyrrolidone.

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